

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for communicating via a network comprising nodes, the method comprising:

predicting a future physical location where a destination node will be located upon arrival of a message unit relayed to the destination node via the network; and

selecting an intermediate node for relaying the message unit between a source node and the destination node in response to the predicted future physical location of the destination node.

2. (Original) The method of claim 1, wherein selecting the intermediate node comprises predicting locations where a plurality of nodes of the network will be upon arrival of the message unit at each of the plurality of nodes, and performing the selection in response to the predicted location of the destination node and the predicted locations of the plurality of nodes.

3. (Original) The method of claim 2, wherein the steps of predicting the locations of the plurality of nodes and selecting the intermediate node are performed by at least one of the plurality of nodes.

4. (Original) The method of claim 3, wherein the steps of predicting the locations of the plurality of nodes and selecting the intermediate node are performed simultaneously.

5. (Original) The method of claim 3, wherein predicting the locations of the plurality of nodes occurs upon arrival or prior to arrival of the message unit at each of the plurality of nodes.

6. (Original) The method of claim 3, further comprising sharing the predicted locations of the plurality of nodes with other nodes of the plurality of nodes.

7. (Original) The method of claim 2, wherein selecting the intermediate node comprises predicting locations where a plurality of nodes of the network will be upon arrival of the message unit at each of the plurality of nodes, and performing the selection in response to the predicted location of the destination node and the predicted locations of the plurality of nodes for relaying the message via at least one of the plurality of intermediate nodes.

8. (Original) The method of claim 7, further comprising causing at least one of the source node and the plurality of nodes to attach to the message unit state information comprising at least one of a prior speed, a prior direction, a prior destination, and a prior location of at least one of the nodes.

9. (Original) The method of claim 7, further comprising causing one of the selected plurality of intermediate nodes to alter a routing list of future intermediate nodes of the selected plurality of intermediate nodes when the predicted location of the destination node was based on outdated information.

10. (Original) The method of claim 2, wherein selecting the intermediate node further comprises selecting a sequence of at least one intermediate node of the plurality of nodes whose predicted location is closer to the predicted location of the destination node than is at least one other node of the plurality of nodes.

11. (Original) The method of claim 1, wherein selecting the intermediate node comprises selecting a node whose predicted location is within a transmission range for receipt of the message unit.

12. (Original) The method of claim 1, wherein the location of the destination node is predicted in response to state information associated with a prior state of the destination node, the state information comprising at least one of a prior speed, a prior direction, and a prior location of the destination node, and a time stamp identifying an age of the state information.

13. (Original) The method of claim 12, further comprising causing the state information to be attached to the message unit, and causing at least one of the intermediate node and the destination node to retrieve, alter, and reattach the state information, wherein altering comprises (i) replacing at least a portion of the state information with information having a more recent time stamp or (ii) adding information having a more recent time stamp.

14. (Original) The method of claim 1, further comprising causing a node of the network to broadcast to a plurality of nodes of the network a request for state information of the plurality of nodes.

15. (Original) The method of claim 1, further comprising attaching to the message unit information identifying the predicted location of the destination node.

16. (Original) The method of claim 1, further comprising causing the intermediate node to select a next intermediate node for relaying the message unit between the intermediate node and the destination node in response to the predicted location.

17. (Original) The method of claim 1, further comprising acquiring geographic information identifying physical features.

18. (Original) The method of claim 17, wherein the physical features interfere with network communications.

19. (Original) The method of claim 17, wherein acquiring geographic information comprises inferring the physical features from attenuation of at least one transmitted signal.

20. (Original) The method of claim 17, wherein selecting the intermediate node comprises selecting a node whose predicted location is essentially unobstructed by the physical features.

21. (Original) The method of claim 1, wherein the message unit is associated with a binary data packet, and further comprising repeating predicting and selecting for each one of a series of data packets.

22. (Currently Amended) An apparatus for routing communications via a network comprising nodes, the apparatus comprising:

a location prediction processor for predicting a future physical location where a destination node will be upon arrival of a message unit at the destination node; and

a relay node selector for selecting an intermediate node for relaying the message unit between a source node and the destination node in response to the predicted future physical location of the destination node.

23. (Original) The apparatus of claim 22, further comprising a state information storage unit for storing state information associated with at least one of a prior state and a predicted state of at least one node of the network.

24. (Original) The apparatus of claim 22, further comprising a geographic information storage unit for storing geographic information identifying physical features that obstruct the network communications.

25. (Original) The apparatus of claim 22, further comprising a state information examination unit for examining state information attached to the message unit.

26. (Original) The apparatus of claim 25, wherein the state information examination unit examines geographic information attached to the message unit.